

CLAIMS

1. An electric motor including a rotor mounted on a motor shaft for rotation around a stator, the rotor including a generally cylindrical wall and a rotor top generally closing the cylinder of the rotor wall, the rotor being connected to the motor shaft by a connecting device, the connecting device being received within an opening in the rotor top and having an aperture for receiving the motor shaft as an interference fit which prevents of rotation of the shaft with respect to the connecting device, the connecting device including a first radially outwardly extending formation at a first side of the rotor top, and a second radially outwardly extending formation at a second side of the rotor top such that the rotor top is received between the first and second radially outwardly extending formations, and there being a spacer between the first radially outwardly extending formation and the first side of the rotor top, the spacer including teeth which dig into the first side of the rotor top and the first radially outwardly extending formation to prevent of rotation of the connecting device with respect to the rotor.
2. A motor according to claim 1 wherein the motor shaft and walls of the aperture in the connecting device are splined.
3. A motor according to claim 1 or 2 wherein the connecting device includes a generally cylindrical body portion through which the aperture is provided, which extends through the opening provided in the rotor top.
4. A motor according to claim 3 wherein the first radially outwardly extending formation extends from a first end of the body portion, and the second outwardly extending formation extends from a second end of the body portion.

5. A motor according to claim 3 or 4 wherein the spacer is an annular member, which is located around the body portion of the connecting device.

6. A method of assembling an electric motor, the electric motor including a rotor having a generally cylindrical rotor wall and a rotor top generally closing the cylinder of the rotor wall, the rotor being mounted on a motor shaft for rotation about a stator, the motor further including a connecting device adapted for connecting the rotor top to the motor shaft, the method including the step of mechanically deforming a portion of the connecting device so as to form a first radially outwardly extending formation, such that the rotor top is clamped between the first radially outwardly extending formation and a second radially outwardly extending formation of the connecting device and movement of the rotor with respect to the connecting device is substantially prevented.

7. A method according to claim 6 wherein the method further includes the step of inserting the motor shaft into an aperture provided in the connecting device such that the shaft engages with the connection device as an interference fit and rotational movement of the motor shaft with respect to the connecting device is substantially prevented.